

Apparatus for Controlling a Fluid Discharge

Abstract

An apparatus for controlling a fluid discharge through an opening in a conduit includes a conduit section, conduit inlet, conduit interior, conduit exterior, and a conduit outlet or opening having a continuously curved perimeter surface with oppositely disposed concave sections and convex sections that are continuous. Also, first and second curved gate members are rotatably mounted and are axially slidably lockably engaged to the conduit exterior including structure to move the gate members symmetrically from a closed position to an open position remaining adjacent to the outlet, the gate members in the closed position are adjacent to the outlet and are adjacent to each other. In addition, fluid sealing between the outlet and the gate members, between the gate members, and between the gate members and the outlet, when the gate members are in the closed position. The gate members are operational to control the fluid discharge through the outlet.